REBUTTAL TESTIMONY OF

JOHN H. RAFTERY

ON BEHALF OF

DOMINION ENERGY SOUTH CAROLINA, INC.

DOCKET NO. 2019-239-E

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.

A. My name is John H. Raftery and my business address is 220 Operation Way, Cayce, South Carolina. I am the Director of Rates and Regulatory Affairs for Dominion Energy South Carolina, Inc. ("DESC" or the "Company").[1]

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A. I have.

Q. HOW DO YOU RESPOND TO ORS WITNESS MR. EVANS' RECOMMENDATION THAT AVOIDED COSTS FOR DEMAND SIDE MANAGEMENT ("DSM") PROGRAMS SHOULD BE CALCULATED BASED ON METHODOLOGY TO BE APPROVED PURSUANT TO ACT 62 IN DOCKET NO. 2019-184-E?

A. DESC agrees with ORS witness Mr. Evans' recommendation that going forward the avoided costs for its DSM programs should be based on the methodology approved by the Commission, as to be determined in Docket No.

[1] South Carolina Electric & Gas Company ("SCE&G") changed its name to Dominion Energy South Carolina in April 2019, as a result of the acquisition of SCANA Corporation by Dominion Energy, Inc. For consistency, I use "DESC" to refer to the Company both before and after this name change.

2019-184-E. DESC also agrees that the updated avoided cost values should not be modified until the five (5)-year program period has expired. Once the avoided cost methodology is approved, the resulting avoided costs would be used to update any energy and demand savings for the portfolio as well as to compute the shared savings incentive. Further, once the new methodology is approved, DESC will use the resulting avoided costs to re-evaluate the cost effectiveness of the full range of measures under each of the proposed programs. This, along with input from its Energy Efficiency Advisory Group, will determine if any new measures are appropriate to implement or if any existing measures should be removed.

Q. HOW DO YOU RESPOND TO THE SUGGESTION THAT DESC HAS NOT COMPLIED WITH THE COMMISSION'S REQUIREMENT THAT IT DEVELOP DEMAND RESPONSE ("DR") PROGRAMS TO ADDRESS WINTER PEAK?

A. As the record here shows, DESC has taken the steps necessary to comply with the Commission's order related to Demand Reduction programs. In Order No. 2018-322(A), issued in May 2018, the Commission required that "SCE&G shall investigate and implement economic demand side management and energy efficiency programs with an emphasis on decreasing the newly developed winter peak." During the month following the Commission's order, DESC began an exhaustive, year-long Potential Study which is the basis of the filing in this proceeding and is sponsored in this hearing by Company witness Mr. Pickles. This Potential Study was the subject of extensive collaborations with the Energy Efficiency Advisory Group that took place over 2018 and 2019, as discussed by

Company witness Ms. Griffin. The Potential Study assessed and adopted a number of broad-based DSM programs that reduce winter peak. Furthermore, it investigated potential DR programs specifically targeted to address winter peak and evaluated whether or not it was economical to implement them at this time.

As indicated more specifically in my Direct Testimony, the Potential Study found that the necessary infrastructure is not in place to make it economically justifiable to implement any of the additional DR programs that were evaluated at this time. The required infrastructure, specifically Advanced Metering Infrastructure ("AMI"), is being rolled out on an aggressive timetable to cover all electric and combo (i.e., electric & gas) areas on our system. The Potential Study found that doing so will make additional DR programs economically justified. As stated in my direct testimony, specific programs will be evaluated and proposed, and reviewed through the stakeholder process when sufficient progress on the AMI roll-out has been achieved.

In the meantime, DESC is addressing winter peak where it is economically feasible to do so through its suite of existing and proposed DSM programs. The most significant new contribution to the reduction of winter peak will come from the program the Company is proposing to target the replacement of residential electric strip heating with energy efficient heat pumps. But, other programs are either being initiated or expanded in the current suite of proposed DSM programs that will also reduce winter peak. The 115.5 megawatts of capacity savings associated with the suite of programs proposed in this proceeding quantifies the level of winter peak impacts.

Q. HOW DID THE POTENTIAL STUDY EVALUATE THE POTENTIAL FOR ECONOMIC DR PROGRAMS?

A. The Potential Study took an in-depth look at potential DR programs. In summary, it determined that additional Time of Use ("TOU") rates and Critical Peak Pricing ("CPP") rates were not cost effective now, but are expected to become cost effective with the roll-out of AMI across DESC's system. Residential and commercial water heater turn off and smart thermostat programs were modeled but did not prove to be cost effective during the five-year program planning horizon and as a result are not proposed at this time. Expansion of the existing emergency load control measures on our system was not considered to be practical either.

Q. PLEASE ELABORATE ON THE LOAD CONTROL MEASURES.

A. The existing load control measures on DESC's system are the Interruptible Service Rider and the Standby Generation Rider programs available to large general service customers. These programs are currently not considered part of the Company's DSM programs but, instead, are used to provide operating reserves to allow the system to respond to emergency situations and contribute capacity toward the reserve margin requirements. Generally, in operating our system, these programs are treated as capacity resources of last resort to be used in situations where customers' immediate energy demands otherwise cannot be met and voltage reductions or load shedding would otherwise be required. These programs are not structured to be used routinely for peak shaving purposes, and have not been marketed to customers for that purpose.

Q. WHY IS EXPANDING THESE PROGRAMS NOT PRACTICAL?

A. As to the industrial interruptible program, winter peaks occur on DESC's system during the morning hours in periods of extreme cold weather. In times of bitter cold, heating is important to industrial and commercial customers for maintaining reasonable working conditions for their employees, and maintaining the integrity of their processes and equipment. It would not be practical for customers to remain in the program if their operations were subject to routine interruptions for peak shaving purposes during these times.

Standby generation programs are limited by air emissions requirements which make it impossible for the Company to rely on them for more than a very limited number of hours per year. The air emissions permits for these standby generators are issued with the expectation that the generators are intended for use in emergency situations at their premises. Peak shaving is a different use. Furthermore, customers cannot afford to allow the Company to absorb their limited pool of permitted operating hours for peak shaving, because they could then lose the ability to test the units and use them for their intended purpose of providing emergency standby service.

The current Interruptible Service Rider and the Standby Generation Rider provide the system operating reserves that are available year round, but are used very sparingly and only in true emergency situations. For those reasons, the Company concluded that expanding the use of these reserve resources so that they can serve as routine peak shaving resources is not feasible or effective.

Q. HOW IS DESC ADDRESSING THE LACK OF INFRASTRUCTURE NECESSARY TO IMPLEMENT COST EFFECTIVE DR PROGRAMS?

A. As described in DESC's Petition for an Accounting Order filed in Docket No. 2019-241-EG, DESC has decided to undertake a multi-year program to install AMI for residential and commercial electric customers throughout its system. Awarding the contract for installation of AMI across the system is taking place currently. DESC anticipates phasing the AMI installation over several years, ultimately resulting in the installation of over 760,000 electric AMI meters at a cost of approximately $98 million. The Potential Study indicated that, with a sufficient saturation of AMI in place, certain residential and commercial DR programs could be cost effective.

Q. HOW DO YOU RESPOND TO THE SUGGESTION THAT DESC RE-EVALUATE ITS DR PROGRAMS ONCE AMI BECOMES AVAILABLE IN DESC TERRITORY?

A. DESC supports that suggestion and intends to do just that. DESC's current plan is to roll out AMI over the course of several years. DESC will keep the Energy Efficiency Advisory Group informed as to the progress of the AMI roll-out. When sufficient AMI saturation levels are reached, DESC will review cost effective DR programs with the Energy Efficiency Advisory Group and propose them to the Commission for approval. Because TOU and CPP are rate-based programs, they will need Commission approval to be implemented.

Q. CAN AMI-BASED DR PROGRAMS BE ROLLED OUT PIECEMEAL?

A. No. AMI works though the networking of meters which communicate with each other across a defined area to relay signals to a central node. For that reason, it is not practical to install meters in isolation or to target the early installation of this form of AMI technology for specific customers who sign up for TOU or CPP demand response programs. Based on the limitations of the technology, the implementation of residential and commercial demand response programs will need to wait until a sufficient saturation of AMI technology is achieved in a market.

CONCLUSION

Q. WHAT ACTION DO YOU REQUEST THAT THE COMMISSION TAKE IN RESPONSE TO YOUR REBUTTAL TESTIMONY?

A. I respectfully request that the Commission find the methodology used to assess the avoided costs in the current Potential Study and DSM program to be appropriate and allow the new methodology, once approved in Docket No. 2019-184-E, to be used as discussed above.

Further, I respectfully request that the Commission find that DESC has met its obligations under Order No. 2018-322(A) to "investigate and implement economic demand side management and energy efficiency programs with an emphasis on decreasing the newly developed winter peak" and to recognize that the Company's $98 million investment in AMI will open up important opportunities for new demand response programs.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes. This concludes my rebuttal testimony.